JPM GUARDIAN

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Advanced Planning Briefing to Industry

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Outline

- Overview
- S&T and Warfighter Needs
- Technical Challenges
- Acquisition Strategy / Funding / Schedule
- Upcoming Business Opportunities
- Contacts

Science &Technology (S&T) Overview

Rapid Area Sensitive-Site Reconnaissance (RASR)

- **Goal:** Develop a Capability to Perform Sensitive Site Assessment and Sensitive Site Exploitation (SSA/SSE) Missions Remotely, through Automated Means to Reduce Exposure of the Warfighter to Hostile Forces and Environments
- **Objectives:**
  - Develop a Capability to Rapidly Survey Large Areas (Whole Rooms, Courtyards, Fields) and Assess Whether Contaminated with Chemical Warfare Agents (CWAs), Toxic Industrial Chemicals (TICS) or Non-Traditional Agents (NTAs)
  - Provide for Unmanned Ground Vehicle (UGV) and Handheld Detector Deployment
  - Leverage Advanced Chemical Sensors like Raman, LIBS Applied to Large Area Scanning
  - Include Remote Sensor Data Feeds Supporting Intelligence Reach-back Assessment Functions

S&T Overview *(Cont'd)*

Transatlantic Collaborative Biological Resiliency Demonstration (TaCBRD)

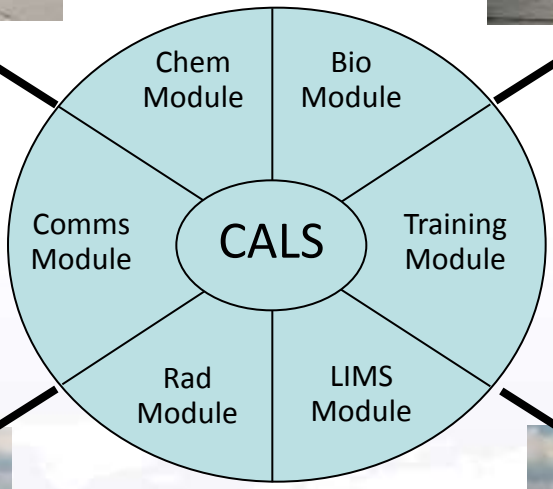
- **Goal:** Develop and demonstrate a DoD capability to shape the interagency approach for resilience in countering a wide area biological event that impacts U.S. and Partner Nation key civilian and military infrastructure
- **Objectives:**
  - Enhance National Defense by Understanding Operational Interdependencies that Impact Recovery from a Biological Event Overseas
  - Strengthen DoD, DoS and DHS Collaboration on Countering Biological Threats or Attacks
  - Develop Enhanced/coordinated Capacities with Partner Nations for Biological Threat Preparedness, Response and Recovery Activities; Strengthen Key Relationships Abroad
  - Improve the Responsiveness and Flexibility of Consequence Management Response Forces
  - Coordinate U.S. Homeland Defense and Defense Support of Civil Authority Capabilities with Homeland Security Activities
  - Ensure Resilience to Catastrophic Events by Providing Capability to Prepare for, Respond to, and Rapidly Recover from a Biological Attack

Common Analytical Laboratory System (CALS) Overview

Provide Common Core Modules Plus Unique User Capabilities

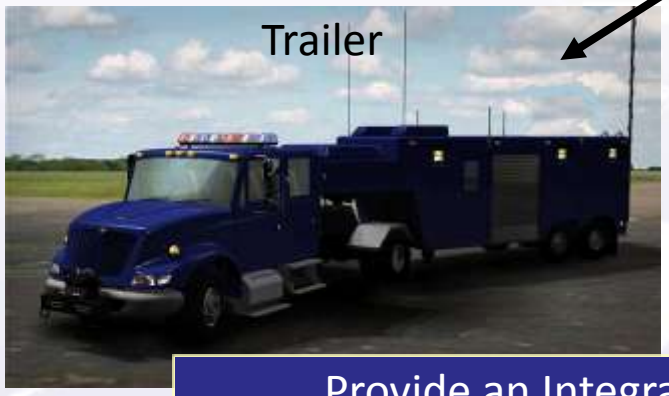
- Shared Acquisition, Development and Testing
- Common Logistics and Training
- Streamlined Sustainment

Results in Cost Savings



- Modular Approach
- Plug and Play
- Platform Independence

Results in More Flexible Capabilities



Provide an Integrated Solution Using Common Core Capabilities

CALS Capabilities

- CALS Modules may be Functionally or Mission Based Depending on Published Capability Development Document (CDD)
- Modules can be Configured for a Spectrum of Throughput
  - Low Throughput -Single Samples looking for Wide Array of Agents
  - High Throughput - Many Samples looking for Same Agent
- Commonality of Equipment/capabilities Across Mission Spectrum
- Integrate with Existing JPEO FoS Information Systems
- Reduce the Operators Required Skill Level and Training Volume
- Meet CBRNE Survivability and EMI Standards
- Able to Operate CONUS / OCONUS

Special Purpose Units (SPU)






Capabilities:

- **Designed for Rapid Acquisition of specialized CBRNE Equipment**
  - **TIC/TIM, BWA, CWA, Radiological Detection/identification**
  - **Personal Protection**
  - **Decontamination**
  - **Sampling**
  - **Situational Awareness**
- **Provide Equipment to National Guard Assets (WMD-CSTs, CERFP), 20th SUPCOM Assets, NORTHCOM CCMRF Assets, and USASOC Assets**
- **Provides a Formal Prioritization and Validation Process for Procurement of Safe, Suitable, and Effective CBRNe COTS Equipment.**

S&T Needs

- **Balance Between Requirements Pull:**
  - **Align with the Joint Requirements Office (JRO) to Address Capability Needs**
  - **Align with Joint Program Executive Office (JPEO) Programs to Address Technology Gaps**
  - **Answer Critical Science Questions that Support Policy, Doctrine and Requirements Decisions**
- **… and technology push:**
  - **"Combating WMD" Centralized Investment in Basic Research**
  - **Identify and Rapidly Exploit Technology Opportunities in the Pursuit of "Revolutionary Technologies"**
  - **Identify and Respond to New and Emerging Threats**
  - **Maintain a Robust Technology Base: Knowledge, Research Capabilities, and Test and Evaluation Methodologies**

S&T Technical Challenges

- **Rapid Area Sensitive-Site Reconnaissance:**
  - **Application of Advanced Chemical Sensor Technologies to Large Area Scanning Applications**
  - **Ensuring Near Real-time Data Feed and Processing to Support Assessment Functions**
  - **Application of Handheld and Mounted Sensor Systems to Reduce Complexity of Assessment Activities**
- **Wide Area Biological Resiliency:**
  - **Understanding Agent Fate, Transport and Reaerosolization**
  - **Outdoor Biological Sampling and Decontamination Methods**
  - **Efficient Indoor Sampling Methods and Realistic Decontamination Approach**
  - **Ensuring Common Equipment/Processes/Standards Across Military, Civilian and International Communities**

JPM Guardian Technical Challenges

- **Integration of Physical Security and CBRNE into a Single Interoperable Network:**
  - **Integration of Disparate Sensors, Networks and Decision Support Tools**
  - **Sensor Data Fusion and Processing for Cueing/Tipping**
- **Identification of COTS to meet CONUS/OCONUS/AOR Operational Requirements**
- **Automation/Integration of Analytical Components**

DTRA-JSTO S&T Funding

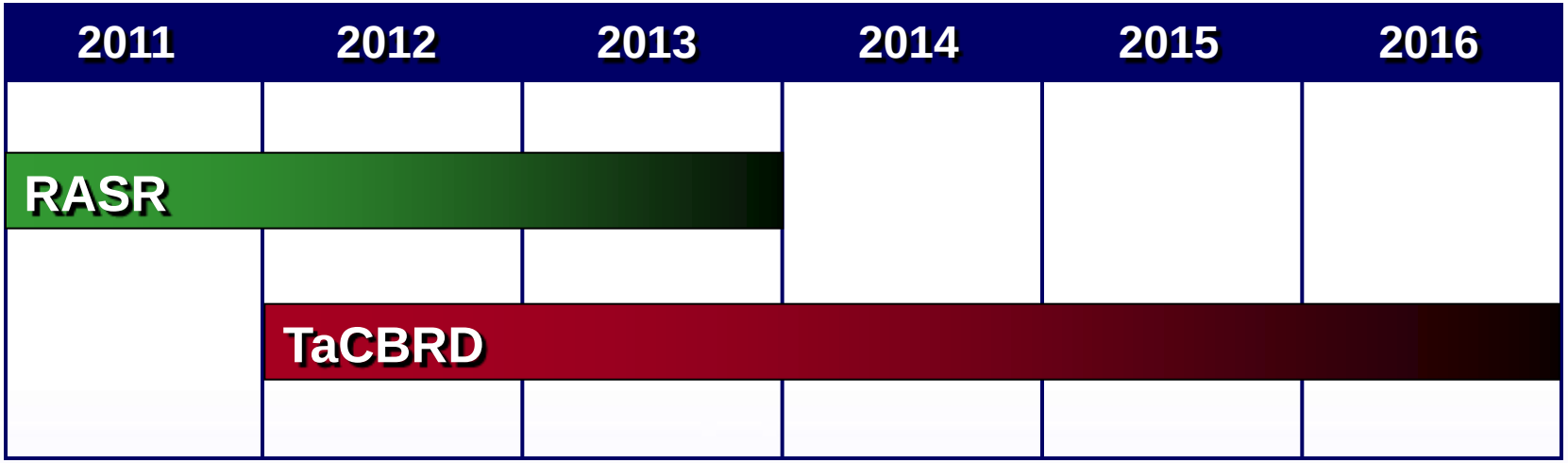
$M	FY11	FY12	FY13	FY14	FY15	TOTAL
6.3	0.98	5.9	3.7			10.58
6.4	12.074	13.126	14.331	3.967	3.983	47.481
TOTAL BUDGET	13.054	19.026	18.031	3.967	3.983	58.061

Funding for S&T Support of JPMG Functional Area

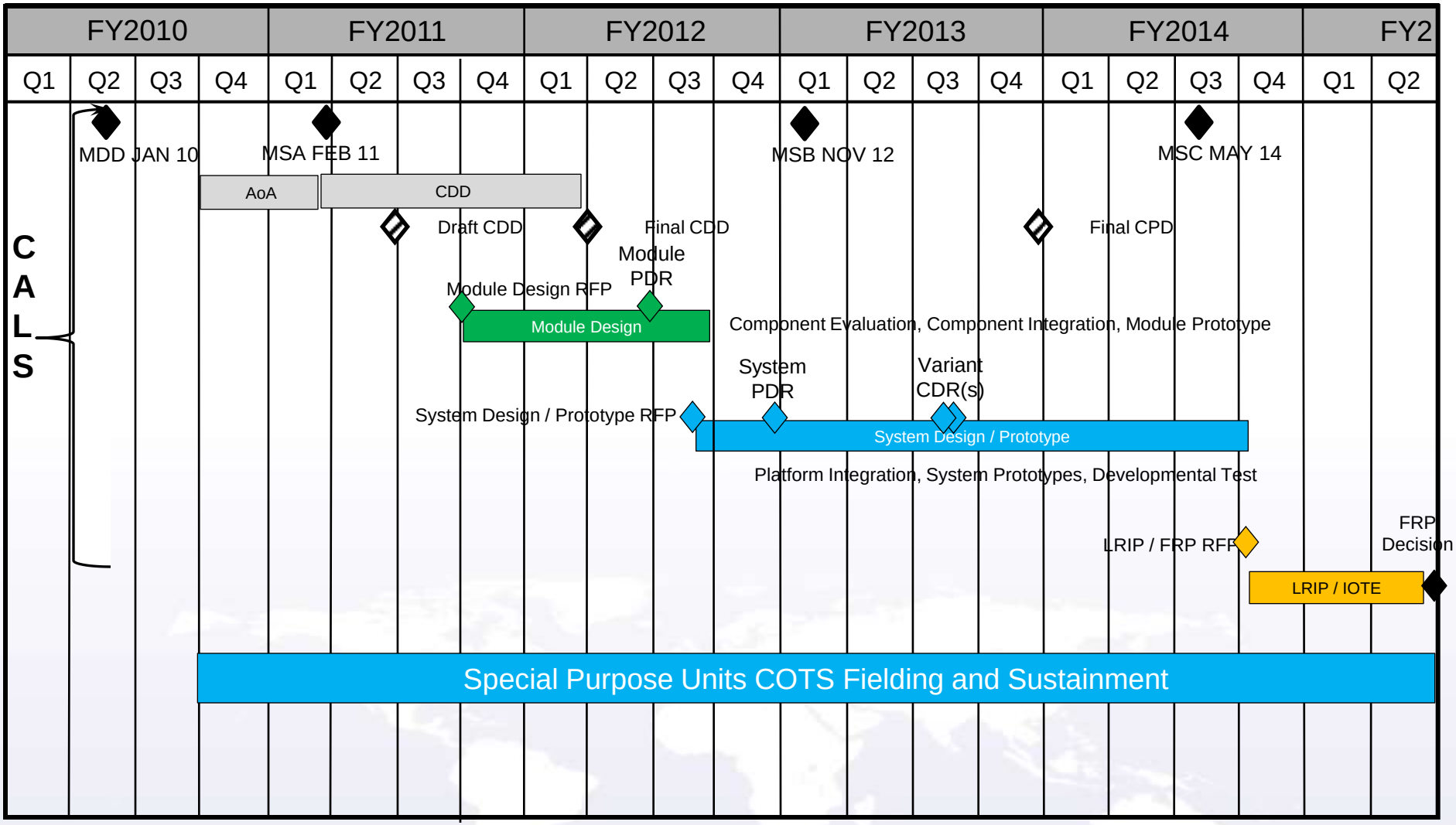
JPM Guardian Funding

$M	FY11	FY12	FY13	FY14	FY15	TOTAL
JPM GU						
BA4/5	10,692	3,822		2,361	2,413	19,288
PROC	22,381	19,287	26,295	26,898	117,173	212,034
Total	33,073	23,109	26,295	29,259	119,586	231,322

S&T Program Schedule



JPM Guardian Schedule



S&T Business Opportunities

Program	Estimated Target BAA Release	Target Funding Year
CB Defense Physical Science and Technology (annual) BAA	25 Aug, 2010 (Open Now)	October 2011
CB Defense Small Business Innovation Research (SBIR) – http://www.acq.osd.mil/sadbu/sbir/homepg.htm	For New Start Projects (FY11-16)	Mid-Nov
Chem-Bio Defense Initiative Fund (CBDIF)	BAA for New Start Projects (FY11-16)	December

JPM Guardian Business Opportunities

CALS Program		
Program	**Description**	**Year**
CALS Technology Development	Perform Module and Overall System Design. Evaluate Components and Execute Trade Off Studies. Equipment Procurement. Anticipated RFP Release – Jan 2011 – Cost Plus Fixed Fee	**FY11-FY12**

Program Points of Contact

Project Manager:

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